

IN THE CLAIMS:

1. (currently amended) A projection exposure system, having ~~at least one beam splitter in the~~ beam path of a pulsed laser light source ~~at least one beam splitter~~ ~~said system~~ having reflecting components ~~splitting a principal beam providing for the passage of a partial beam on at least one detour line with at least one partial beam so that a beam recombining element reunites~~ ~~joins the partial beams~~ ~~beam with the principal beam~~ to form a total beam, said beam splitter having a mirror which is arranged at ~~an~~ the Brewster angle to the beam path.

2. (previously presented) The system as claimed in claim 1, wherein the detour line has a length such that an optical path difference of more than 0.5 m is produced between the partial beams.

3. (previously presented) The system as claimed in claim 1, wherein at least three reflecting components form a detour line .

Claims 4 - 6 (canceled)

7. (previously presented) The system as claimed in claim 1, wherein the reflecting components are constructed as mirrors.

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8. (previously presented) The system as claimed in claim 1, wherein two detour lines are arranged in series in the beam path .

9. (previously presented) The system as claimed in claim 8, wherein a first detour line has a length of over 2 m, and a second detour line has a length of over 10 m.

10. (canceled)

11. (previously presented) The system as claimed in claim 1, wherein the beam recombining element is constructed such that a portion of the partial beam which has run via the detour line is repeatedly sent via the detour line.

12. (previously presented) The system as claimed in claim 11, wherein at least one phase—retarding plate is arranged in the beam path.

13. (previously presented) The system as claimed in claim 12, wherein a 10 phase-retarding plate is arranged in the beam path upstream of the beam splitter, and at least one further phase—retarding plate is arranged in the detour line.

Claims 14 - 15 (canceled)

16. (new) A projection exposure system, having at least one beam splitter in a beam path of a pulsed laser light source said system having reflecting components splitting a principal beam for the passage of a partial beam on at least one detour line so that a beam recombining element joins the partial beam with the principal beam to form a total beam, said beam splitter having a mirror which is arranged at an angle to the beam path, said detour line having an easily detuned kepler telescope positioned therein.

17. (new) The system as claimed in claim 16, wherein the detour line has a length such that an optical path difference of more than 0.5 m is produced between the partial beams.

18. (new) The system as claimed in claim 16, wherein at least three reflecting components form a detour line.

19. (new) The system as claimed in claim 16, wherein the angle is between 35 and 50°.

20. (new) The system as claimed in claim 19, wherein the Brewster angle is provided as the angle.

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21. (new) The system as claimed in claim 16, wherein the reflecting components are constructed as mirrors.

22. (new) The system as claimed in claim 16, wherein two detour lines are arranged in series in the beam path.

23. (new) The system as claimed in claim 22, wherein a first detour line has a length of over 2 m, and a second detour line has a length of over 10 m.

24. (new) The system as claimed in claim 16, wherein the beam recombining element is constructed such that a portion of the partial beam which has run via the detour line is repeatedly sent via the detour line.

25. (new) The system as claimed in claim 24, wherein at least one phase-retarding plate is arranged in the beam path.

26. (new) The system as claimed in claim 25, wherein a 10 phase-retarding plate is arranged in the beam path upstream of the beam splitter, and at least one further phase-retarding plate is arranged in the detour line.

27. (new) A projection exposure system, having at least one beam splitter in a beam path of a pulsed laser light source said system having reflecting components splitting a principal beam for the passage of a partial beam on at least one detour line so that a beam recombining element joins the partial beam with the principal beam to form a total beam, said beam splitter having a mirror which is arranged at the Brewster angle to the beam path, said detour line having an easily detuned keppler telescope positioned therein.
28. (new) The system as claimed in claim 27, wherein the detour line has a length such that an optical path difference of more than 0.5 m is produced between the partial beams.
29. (new) The system as claimed in claim 27, wherein at least three reflecting components form a detour line .
30. (new) The system as claimed in claim 27, wherein the reflecting components are constructed as mirrors.
31. (new) The system as claimed in claim 27, wherein two detour lines are arranged in series in the beam path .

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32. (new) The system as claimed in claim 31, wherein a first detour line has a length of over 2 m, and a second detour line has a length of over 10 m.

33. (new) The system as claimed in claim 31, wherein the beam recombining element is constructed such that a portion of the partial beam which has run via the detour line is repeatedly sent via the detour line.

34. (new) The system as claimed in claim 33, wherein at least one phase—retarding plate is arranged in the beam path.

35. (new) The system as claimed in claim 34, wherein a 10 phase-retarding plate is arranged in the beam path upstream of the beam splitter, and at least one further phase—retarding plate is arranged in the detour line.

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36. (new) A projection exposure system, having at least one beam splitter in a beam path of a pulsed laser light source said system having reflecting components splitting a principal beam for the passage of a partial beam on at least one detour line so that a beam recombining element joins the partial beam with the principal beam to form a total beam, said beam splitter having a mirror which is arranged at the Brewster angle to the beam path, said detour line having an easily detuned keppler telescope positioned therein, and of such a length that an optical path difference of more than 0.5 m. is produced between the partial beams.

37. (new) The system as claimed in claim 36, wherein at least three reflecting components form a detour line .

38. (new) The system as claimed in claim 36, wherein the reflecting components are constructed as mirrors.

39. (new) The system as claimed in claim 36, wherein two detour lines are arranged in series in the beam path .

40. (new) The system as claimed in claim 39, wherein a first detour line has a length of over 2 m, and a second detour line has a length of over 10 m.

41. (new) The system as claimed in claim 36, wherein the beam recombining element is constructed such that a portion of the partial beam which has run via the detour line is repeatedly sent via the detour line.

42. (new) The system as claimed in claim 41, wherein at least one phase—retarding plate is arranged in the beam path.

43. (new) The system as claimed in claim 42, wherein a 10 phase-retarding plate is arranged in the beam path upstream of the beam splitter, and at least one further phase—retarding plate is arranged in the detour line.

44. (new) A projection exposure system, having at least one beam splitter in a beam path of a pulsed laser light source said system having reflecting components splitting a principal beam for the passage of a partial beam on a first detour line having a length of over 2 m and a second detour line having a length of over 10 m, so that a beam recombining element joins the partial beam with the principal beam to form a total beam, said beam splitter having a mirror which is arranged at the Brewster angle to the beam path.

45. (new) The system as claimed in claim 44, wherein the detour line has a length such that an optical path difference of more than 0.5 m is produced between the partial beams.

46. (new) The system as claimed in claim 44, wherein at least three reflecting components form a detour line .
47. (new) The system as claimed in claim 44, wherein the reflecting components are constructed as mirrors.
48. (new) The system as claimed in claim 44, wherein the beam recombining element is constructed such that a portion of the partial beam which has run via the detour line is repeatedly sent via the detour line.
49. (new) The system as claimed in claim 48, wherein at least one phase—retarding plate is arranged in the beam path.
50. (new) The system as claimed in claim 49, wherein a 10 phase-retarding plate is arranged in the beam path upstream of the beam splitter, and at least one further phase—retarding plate is arranged in the detour line.